DEVOTED TO AGRICULTURE AND ALL ITS VARIOUS KINDRED ARTS AND SCIENCES.

Honor waits, o'er all the earth, The art that calls her harvests forth.—BRYANT.

VOL. I. SATURDAY, FEBRUARY 17, 1849. NO. 5.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

MANURES.

[Continued from p. 55.]

At the agricultural meeting, January 30, the discussion on manures was continued. Hon. M. P. Wilder in the chair, who read the statements of Mr. Colman, showing that large crops of wheat, to the amount of sixty, eighty, and even ninety bushels had been raised in England to the acre, showing the possibility of Mr. Pell's raising eighty bushels to the acre, as he had stated on a previous evening. He also showed the valuable effects of charcoal on wheat in experiments made in Ohio, the land to which fifty bushels of charcoal dust was applied yielding twenty-five bushels to the acre, while that not dressed produced only five bushels to the acre.

Hon. Mr. French, of Braintree, said, that, farm it as we may, manure is essential to good crops. Before the improved ploughs of Howard, of Prouty & Mears, and the millions which the Worcester concern throw broadcast over the world, were introduced, a celebrated Roman was asked what was most important to good farming, and he answered, thorough ploughing; and in answer to the inquiry, what was the next essential, he replied, manure.

Mr. F. said, his mode of making manure was to cart muck to the upland, after his meadow had become frozen, and expose it to air and frost, and then use it in his farm-yard, barn cellar, and hog-pens. This is worked over in winter, and again the first of May. The muck absorbs the liquid manure, and the whole mass makes excellent manure. He found from experiments that muck applied to the soil without preparation, produced only a crop of sorrel. He thought the mixing of lime with animal manure was an injurious practice. He had not been successful in his experiments with guano. Perhaps the application is not well understood. He made a compost of thirty cords of meadow muck, four thousand gallons of urine, half a ton of guano, one hundred bushels of ashes, and one hundred bushels of crushed bones, and he was well satisfied with the result.

Mr. Teschemacher spoke of the great storehouses of manure and valuable absorbents, such as clay and charcoal, which retain for the use of plants ammonia, and other useful properties. He said that urine was one of the most important manures, as it contained phosphates and ammonia.

Cheever Newhall, Esq., of Dorchester, said, that it was a bad practice to allow rains upon manure, as they washed away its fertilizing properties. He made his compost under cover, in the barn cellar, which prevented any waste from rains, or from drying winds and hot sun. He mixed crushed bones and ashes together, and in a few days they became a jelly. He added these to meadow mud, and made an excellent manure for top dressing grass lands, far cheaper than animal manures.

Mr. Bartlett, of the Cultivator, said, that he mixed wet ashes and bones together; the ammonia was driven off, and he thought that he had spoiled his manure, but it produced good turnips.

Mr. Cole, of the New England Farmer, said, that the great object of the farmer should be to save animal manures, half of which were now wasted. The liquid manure absorbed in loam, peat, or muck, is worth as much as the solid manure. There is great economy in using dry loam, one ton of which will absorb as much liquid as four tons of moist loam. As an absorbent, he preferred plaster to charcoal, as plaster contains nutriment for plants. We need more definite experiments. When we use many ingredients in compost, we cannot tell what is useful, or what may be injurious.

Hon. Mr. Brooks, of Princeton, said, that farmers had not money to buy manure, nor did they need it; every farmer had on his farm the means of enriching it. By using mud, peat, loam, &c., to save the urine, his manure would increase; that would increase his crops, and his crops would increase his stock, and that his manure, and all go on increasing each other, until he may make his lands too rich for crops of a good quality. Burned clay or soil generally is an excellent absorbent.

On the evening of February 7, the discussion was continued. Hon. M. P. Wilder in the chair. He made a few remarks on the importance of saving manure from waste by using plaster, charcoal, carbonized clay, and other absorbents.

Mr. Teschemacher said, that on the first applica-

tion of science to agriculture, the calculation was, that if the farmer always sold his produce, his lands would become exhausted, unless he added something to his farm to keep up the fertility. But it seems that this was not the best calculation, for Mr. Brooks has shown that the farmer has, on his own land, the means to replenish the elements taken away in the crops, if he will collect all the materials he has, and use clay as an absorbent. He said that the use of plaster had been alluded to, and he would use it as an absorbent in the stable; but for other purposes he should prefer charcoal, as more powerful. He was much in favor of definite experiments, as had been suggested, but it was very difficult making them. That in Ohio, on the use of charcoal on wheat was very definite, as alternate strips were manured with it. Mr. T. made a few remarks on the value of urine applied to agriculture, of general knowledge among farmers, and the importance of the profession, calling into action the varied powers of the mind, and opening a wide field for research and investigation.

Mr. Buckminster, of the Ploughman, said, that he was glad that the attention of farmers was called to this subject. We need something to hold manure on our sandy soils. There is much sand in this state, less in Maine. Charcoal wears out in the soil, but clay is durable.

Lieutenant-Governor Reed said, that he had not sufficient practical knowledge to give information on that subject, but he had listened with much interest to the discussion, and he was astonished to learn the great value of liquid manure, as had been shown in the discussion. He had long been a close observer, and he did not think that one fourth of our farmers saved their liquid manure. He differed from those who opposed deep ploughing. He thought that manures generally wasted by passing upward. The roots of plants run down low for food; even the onion extends down eighteen inches. He said, that some rich men, who were called gentlemen farmers, expended much in farming, and they know not the cost.

The president read a communication from Mr. Joseph Breck, of Brighton, showing his experiments on vitriolized bones. He prepared a cavity of loam. He put in six barrels of bones, cost one dollar and fifty cents per barrel, wet them, and put them into a conical heap. In a few days they were hot. He then spread them out, leaving a basin in the centre, with loam around the edge, and added one carboy of sulphuric acid, often called oil of vitriol, mixed with an equal quantity of water. These operations need great caution, from the powerful effects of the acid. In half an hour the effervescence ceased. Some of it was like paste. It was covered with coal dust and ashes, about equal to the heap of bones. He used this manure for various crops, with excellent success.

Samuel Walker, Esq., of Roxbury, said, that he had been engaged in cultivation for forty years, and his heart was with the farmer. He had used, for manure, clay, peat, mud, ashes, charcoal, and lastly virgin soil, which succeeded when other manures failed. He had used large quantities of manures, till they ceased to have any effect. On some lands he had used sand with success. To animal manure he adds sand, clay, or charcoal, to prevent its heating. He then covers it up with clay, charcoal, &c.

Mr. William Parker, of Boston, said, that some were surprised at his stating that freezing manure was injurious. One object of having a barn cellar was, to save manure from waste by freezing. He thought the loss in this state by leach from paper-mills and soap manufactories was fifty thousand dollars annually. A preparation of lye and peat makes an excellent top dressing, for grass lands, without animal manures. All animal substances are excellent manures — the bones, horns, hair, hoofs, blood, &c.

Mr. Horatio Mason, Medway, stated that, in 1840, he burned ten coal-kilns on an acre of land, and all the turf was taken off to cover the kilns. After taking away the coal, a cord of fine coal or dust was taken off and sold, and then the materials from the pits were scattered over the lot. This rendered the land very productive, and it had continued so nearly up to the present time. He could not determine whether the benefit was from coal dust, ashes, or burned turf.

Mr. H. C. Merriam, of Tewkesbury, said, that farmers in this state could not afford to raise common crops. It costs a farmer from five hundred to one thousand dollars a year for manure, and he can only attend to horticulture, where the country was thickly inhabited, with profit. He recommended one hundred pounds of saltpetre and two bushels of salt to the acre, especially for peach-trees.

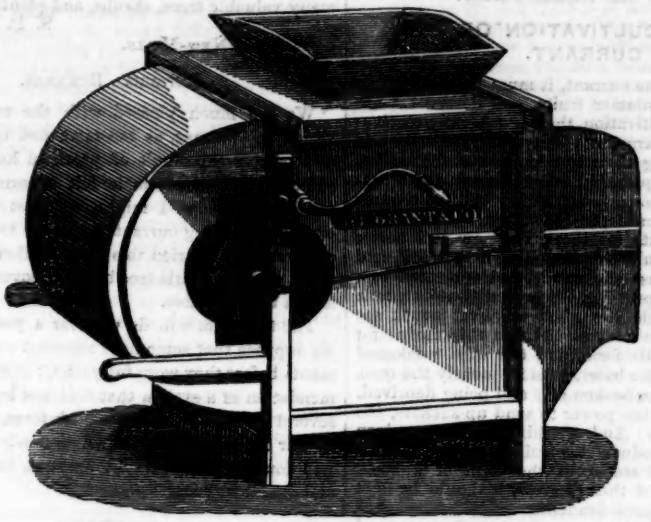
Mr. Brooks said, he thought that the gentleman mistook as to profits. He could make money by farming, the simple prose business, leaving out horticulture, or the poesy of cultivation. He could make more in raising corn here, than that gentleman could in Ohio. We do not want high manuring, nor the great growth of trees, as we have heard, for they are worthless, and this is the cause of so many trees dying after being forced to a great and unhealthful growth. Ammonia may produce a great crop of straw, but not of wheat.

Mr. Brigham, representative from Westborough, said, that lime, plaster, and charcoal, and guano, were all very good; but he believed with the gentleman from Princeton, that every farmer had the means of improving his lands on his own farm. He made his manure in his barn cellar, and his cattle had not lain out a night for eight years. He used sand under his cows; plaster was good to fix the ammonia, and purify the air. He made inquiry as to the utility of green crops for manure.

Mr. Brooks said, that plants feed mostly on the atmosphere; they draw nutriment from the subsoil, and by their application to the soil it becomes rich. He thought a green crop might be applied every third year, and keep up the fertility of the soil.

Hon. John C. Gray said, that in Scotland it had become an established principle, that it was more economical to let the crop pass through the animal, and apply the manure then, than apply the crop to the soil.

Subject for next meeting, *Farm Stock*.



GRANT'S PATENT FAN MILL.

Fan mills are among the most useful labor-saving machines used by the farmer; for with this he can always have a breeze when it is wanted to separate the chaff from his grain, and he can regulate the draught of the wind to suit his purposes. This is far better than to depend on uncertain and fitful breezes. We have known some cases, of farmers who lived in sheltered places, hauling their grain half a mile to a bleak place to winnow it. Again, for want of a breeze, they have sometimes delayed winnowing their grain, and in consequence there was much waste by rats and other small depredators, and occasionally a large animal would get access to the heap of grain, and greatly reduce it to his own injury or danger.

To avoid these evils, and to manage his crops with economy, the farmer needs a good winnowing machine, by which he will not only save labor and grain, but he will prepare it in a better state for the market, or for home consumption, or sowing.

The recent invention of I. T. Grant ranks high, and competent judges have pronounced it the best fan machine in this country. The following statement is from the inventor.

"Our fan-mills have taken the first premium at four of the New York State Agricultural Fairs, and at the State Fairs in Pennsylvania and Maryland, in 1845. We were awarded the first premium at the fair of the Mechanics' Institute, held in the city of New York, in 1846, and also at a large number of county fairs. Our mill received the highest consideration at the great National Fair, recently held at the city of Washington. It has uniformly and in all cases taken the first premium wherever it has been presented for competition. We have had frequent trials of them against time, and find no difficulty in chaffing and screening one bushel of wheat per minute, (with the large sizes,) taking out all the chess, cockle, and smut at the same time, being the only mill that cleans wheat at one operation, known to the inventor; (all other mills have to run the wheat through twice to perform the same labor.) They will also clean all other kinds of grain and seed at once running through the mill, (as given by the directions.) Certificates the inventor thinks needless, as we warrant our mills to perform according to recommendation. If necessary, we could procure them from many gentlemen, stating that they have saved enough timothy seed in one season, while cleaning their wheat, to pay for the mill."

These mills, of various sizes, are manufactured and sold, by Messrs. Ruggles, Nourse, & Mason. They are made in the most substantial manner, and of the best materials. Seven sieves accompany each mill, adapted to grains, grass seed, beans, peas, and other seeds, of various sizes, with directions for their use.

CATERPILLARS.

An English agricultural paper gives the following method of destroying caterpillars, which was accidentally discovered, and is practised by a gardener near Glasgow. A piece of woollen rag had been blown by the wind into a currant bush, and when taken out was found covered by the leaf-devouring insects. Taking the hint, he immediately placed pieces of woollen cloth in every bush in his garden, aud found the next day that the caterpillars had universally taken to them for shelter. In this way he destroys many thousands every morning.

EARLIEST FOOD FOR BEES.

In a conversation the other day with a worthy and observing farmer, he remarked that the earliest food for bees, in the spring, is maple sap. He states that he has seen them gather round the sap troughs, in the woods, during the warm days in the spring, before the buds or tassels of the willow and other trees and shrubs had put out, sipping and making themselves glad with the sweets that they find there. It wouldn't be a bad plan, if a person had any maples in the vicinity of his hives, to tap them for the use of his bees. — *Maine Farmer.*

For the New England Farmer.

ON THE CULTIVATION OF THE CURRANT.

Mr. Editor: The currant, it must be admitted, is one of our best summer fruits, and deserves more attention in its cultivation, than it generally receives from most of our farmers. Many still retain the old kinds, often leaving them to take care of themselves year after year, apparently satisfied with their producing a small, sour, poor fruit. All cultivators should at once discard the old varieties of the currant, and substitute for them, the new and better kinds. These should be planted in a rich soil, and kept clear from grass and weeds, and subjected to a regular system of pruning. Some cultivators prune the shrub to a single stem, but we never could see much advantage to be derived from this mode; for when grown in this form, and the stem weakened by the attacks of the borer, as is frequently the case, it is very liable to be broken off; and being deprived, before planting, of the power to send up suckers, the whole plant is lost. And we think also, in a given space, they will produce less fruit than those cultivated with several stems, in the form of a bush. But when permitted thus to grow, it should be kept clear from superfluous branches and old wood, endeavoring always to keep a succession of young and vigorous wood, of two or three years' growth; for it is on such branches that we always find the best fruit. Currants are much better to remain some time on the bushes, after they are well colored, and supposed to be ripe. They improve in their flavor, and lose much of their acidity. Knight's Early Red and Sweet Red, the White Dutch, together with all other early or comparatively sweet varieties, of the currant, should be placed on the south side of a wall or fence, fully exposed to the sun. This exposure will hasten the ripening of the fruit, and lessen its acidity. On the contrary, the late varieties, such as Lovett's Red, and the Victoria, should be placed on the north side of a wall, or fence. By adopting this mode of planting the currant, they can be brought forward much earlier in the season, or retarded to late in autumn. We also prefer these close quarters for our bushes, to more open ones in the garden, because we can the more effectually secure the fruit from the depredations of birds. In regard to the different kinds of currants now under cultivation, we would name the Red and White Dutch, two very good varieties. The latter, when fully ripe, is much less acid than the red. The Champagne, a pink-colored variety, is very handsome and is more acid than the red. Mr. Knight's Sweet Red is only comparatively so, being less acid than the White Dutch. Knight's Early Red, being about ten days earlier than any other currant; Knight's Large Red, larger than the Dutch; Lovett's Large Red, a good late currant; Victoria, an uncommonly large, fine currant; and the Cherry currant, lately introduced, said to be one of the largest currants, but not thought, by some, to be very good or productive. The black currants are medicinal, and not relished, by many persons, until they have acquired a fondness for them by frequent use, as we do for the tomato. It is then, as we ourselves do know, most delectable to the taste. The Black Grape and Black Naples are some of the best varieties of this currant. There will probably be many new varieties of the currant added to the above list, from our newly-acquired territories on the shores of the Pacific; some having already been discovered, with fruit as sweet and as pleasant as the strawberry. And when the adventurers, now pressing forward to those shores, shall have, in some measure, exhausted its mineral wealth, we hope their attention will be directed to its vegetable productions, and that we, who dwell on the shores of the Atlantic, shall receive from them many valuable trees, shrubs, and plants.

S. P. FOWLER.

Danvers, New-Mills.

Editorial Remarks.

We are much pleased with the mode of cultivating the currant, as recommended by Mr. Fowler, as it shows the result of practical knowledge, and sufficient patience to make fair experiments. Many writers — perhaps I might say most writers — recommend training currant bushes as trees, and many cultivators have tried this mode to their loss; for in a few years the little tree becomes covered with moss, and is unproductive.

The tree form will do well for a year or two, and we suppose that some have reported on their experiments before they were fully tried; hence the recommendation of a system that will not bear the test of several years. Trained in bush form, and managed as our correspondent has recommended, the currant will flourish long, without renewal, and yield large and excellent crops.

For the New England Farmer.

SPRING BUDDING OF FRUIT-TREES.

It may not be generally known that fruit-trees can be budded in the spring as soon as the bark will slip with ease, with equally as good success as those done in the usual season.

Spring budding possesses some advantages, inasmuch as one year's growth of the bud is obtained in advance of those budded in summer or fall. Scions cut the previous fall or winter may be preserved in moss or saw-dust, so as to perform this operation as late in the season, with safety, as can be with the present year's growth of scions. This is quite a convenience when scions are wanted from a distance, as there is not so much trouble in preserving them perfectly fresh as when cut in the leaf.

The only difference necessary to make betwixt spring and fall budding is, the stock of the former should be cut off at the time of budding, three or four inches above the insertion of the bud, and a coat of shellac or other cement applied to the stock to prevent decay, and for the health of the tree. I think this should be done in all cases.

D. TABOR.

Vassalboro', Vt., 1849.

For the New England Farmer.

DIFFICULTIES IN FRUIT-GROWING.

Mr. Editor: Having this day been making out an order for a lot of fruit-trees, I will make some remarks upon this text. How can any one determine which are the best varieties of the different kinds of fruits? The difficulties in the way are manifold. Our nursery-men's catalogues contain endless varieties, one half of which are entirely worthless; and again, no two catalogues give the same names for the same fruits.

These are evils which can easily be remedied, if those most interested would begin by learning that those catalogues will command the most notice which contain the *best* and not the *greatest* varieties; and then by agreeing upon one system of nomenclature. I am aware that attempts are being made to bring about the last, by some of the Horticultural

Societies; but large bodies move slowly, and I fear it will be a long while before they fulfil their intentions. But supposing the above difficulties are removed, there are others that are not so easily disposed of. Soils have much to do with the raising of good fruit, probably more than most people imagine, and sunshine and shade, and stimulants in the shape of manures, have their due influence. And here the doctors disagree, and create a confusion enough to make the unlearned give up in despair. One goes for a sandy soil, another says clay; one says dry soil, another wet; one recommends stimulating guano, and another some inert scrapings from the road-side; one says unfermented manure is best, and another says no; and so on to the end of the chapter. Alas! it is more than poor human nature can bear, and the book is shut without one ray of light left to guide the reader. But there is a cause, I think, for all this. Many of those who have put forth their experiments (I say it without any disrespect) have not been thoroughly educated to their business, and their minds not having been well trained to observe with the nicety that is required the delicate influences of soils and manures, have come to erroneous conclusions ofttimes. If there is any branch of business that claims an apprenticeship as long as that of Jacob's, it is horticulture. Ay, a lifetime is too short, even should it extend to a patriarchal length. The *cause* suggests the *remedy*.

The last difficulty that I shall name is unmovable. The difference is in man's palate. You may put the question to ten persons, asking which are the five best kinds of apples, pears, plums, peaches, and cherries, and no two shall agree in three out of the five. All the difficulties I have named will step in to vary the opinions of each.

My advice, then, is, that those who wish to purchase should seek information from the highest sources, and observe closely themselves, and even then they will sometimes be disappointed.

Truly yours.

JOHN G. LOCKE.

Lowell, *Feb.* 1, 1849.

For the New England Farmer.

DEEP TILLAGE.

Mr. Cole: All cultivators of the soil, I think, will agree that it is better to have a deep, rich soil, than a thin one. Crops on a deep soil are not so easily injured, either by drought or excessive rains. In dry weather, there is a better circulation of the moisture amongst the roots of plants, and in wet, a free opportunity for the excess of water to soak down, and thus be reserved for use in time of need.

While all agree with me in my views thus far, there is a great diversity of opinion in relation to the propriety of deepening the thin soils; some contending that the subsoil contains *poison*, which, if brought up and mixed with the surface soil, will surely blast all the hopes of the unlucky farmer, who shall be bold enough to attempt it, and that it is not best to bring up a particle of the earth, in order to deepen the soil, however thin it may be; while others as strongly advocate deep ploughing and deep tillage, bringing up the subsoil, to be acted upon by the atmosphere, and at length forming a deep, free soil, suitable for the production of abundant crops.

Having advocated, and practised upon the last of these opinions for more than twenty-five years, the object of this communication is, to give some hints to farmers respecting deepening the soil.

The nature of the soil and the circumstances of the cultivation should always be considered. If the subsoil is clay, or very hard and tenacious, the land should be ploughed in the fall, that the frost may operate upon it; and if there be not an abundance of manure, a smaller quantity should be brought up; so that there may not be sufficient to injure the growth of the crops the first season, but rather to increase them. Gravelly and sandy loams may be ploughed deeper at first. If lands are wet, all the good effects of "deep tillage" cannot be attained until draining is resorted to. My practice has been, and my advice now is, to deepen gradually; but as I have before stated, how fast, depends upon circumstances. By all means, however, obtain a deep rich soil wherever you intend to till.

A gentleman, who has travelled through the eastern and southern parts of this state considerably, amongst farmers, and who is himself a cultivator of the soil, remarked to me, a year or two since, that he could pick out those farms where deep ploughing had been the practice, from the superiority of the crops, and that, upon inquiry of the owners, he was seldom or never mistaken in his opinions.

Yours respectfully,

S. M. STANLEY.

West Attleborough, *Feb.* 1, 1849.

To the Editor of the New England Farmer.

Mr. Cole: Having recently turned farmer, or, rather, having resumed an occupation which I pursued, to some extent, in my earlier years, and having subscribed and paid for your *new* "New England Farmer," I shall take the liberty, usually claimed by the patrons of agricultural periodicals, to propose questions, and, perhaps, occasionally to offer solutions; and, possibly, to give advice pertaining to this department of industry; conceding to you, of course, the undoubted right of an editor, either to put me in print or cast me under the table.

The form, type, and paper, of your periodical, is superior to any thing of the kind I have seen. Its external appearance is neat as a California coin. It will furnish, at the close of each year, a convenient *hand volume*, with a fair, readable letter, free from the many effacements on the numerous folds which are necessarily made in the common folio sheet; and, if well conducted, will furnish a good library book, to which the reader may frequently recur with pleasure, as well as profit. And now I beg to advise that this fine mechanical character of the paper may be scrupulously preserved.

But perhaps you may think I am complimenting the paper-maker, the engraver, and printer, at the expense of the editor — that I commend the hand, but neglect the head. I do not intend this. The first glance at *their* work furnishes us the proof of their ability; but the length, breadth, and depth of intellectual, editorial powers are not so readily developed. I am much pleased with the articles, original and selected, which have appeared in the first numbers; and your experience, acquired in a former chair, will lead your subscribers to require much at your hands. Indeed, the *name* you have assumed devolves on you a heavy responsibility. The *old* "New England Farmer," the original of agricultural publications, at least in this part of the country, was managed with great ability, and probably effected more for the good of agriculture, — as it occupied the entire field, — than any subsequent publication in New England; but still I hope it will never be said, with truth, of you or your paper, — "*Sequitur patrem, sed non passibus æquis.*" [He follows his father, but not with equal steps. — Ed.]

I suppose it is within the scope of your plan to indulge, and even to cherish, inquiries upon all subjects relating to agriculture and horticulture; and to publish the results of experiments which have been,

or may be, instituted, to advance the interests of the farmer. Great advantages have already accrued from these interchanges of views and opinions; but it is evident that much yet remains to be accomplished; and the partial success which has resulted from the efforts which have been put forth, of this character, should stimulate every friend of industry to continued exertion in this direction. If the plan and purpose of your paper be such as I have supposed, I may, occasionally, offer communications having a more direct relation to the interests of agriculture.

Your obedient servant,

A. T. L.

BRIDGEWATER, *Feb. 5.*

For the New England Farmer.

ENTOMOLOGY.

The structure, habits, and transformations of insects, is a subject, the knowledge of which is of very limited diffusion; and yet there is no branch of natural history more deeply interesting, especially to the agricultural portion of the community. The orchard, field, garden, and even the forest, are subject to their ravages; whole crops are frequently destroyed, or so materially injured as scarcely to be worth harvesting; and the hopes of the farmer are oftentimes disappointed by the sudden appearance of myriads of them, previous to which, he indulged high anticipation of a bountiful supply for man and beast. Were a knowledge of insects more generally diffused, and the best means of checking their depredations better understood, a large amount of vegetable production might be added to the enormous quantity now grown in this region, and a great amount of information be possessed in regard to this branch of natural science, which, to him who has a taste for the curious in nature, is very interesting, as well as useful.

Within a few years, insects of some kinds have increased to an alarming extent. The rose-bug, for instance, literally swarms, devouring every thing, almost indiscriminately, and all means used to check it seem to be ineffectual. Many others might be named, which are more numerous than formerly, and which seem, from their immense numbers, to threaten destruction to certain crops.

The study of insects may appear like a trifling occupation, to many. But what can be of more importance to the farmer than the history of the multitude, whom no man can number, which are laying waste his crops? It is not expected that every one will perfectly understand the science of entomology; but any one may obtain sufficient knowledge of it to be of much benefit to him in conducting the various branches of agriculture.

The "Treatise on Insects injurious to Vegetation," by Dr. T. W. Harris, is a work which should be in every farmer's library. It contains a vast amount of information on the subject; embracing their history, and the best means of destroying them, and preventing their ravages. Agricultural papers have done much, within the few past years, in diffusing a knowledge of this subject, and the habits of many insects are now generally understood, which, but a short time since, were but imperfectly known; still there is a wide field open for study, and he who enters upon it cannot but be interested in its exploration.

O. V. HILLS.

GENERAL REMARKS ON MANURES, &c.

In the recent discussion on the subject of manures, at the State House, — a report of which may be found on page 55, — Hon. Mr. LEONARD, of Norton, expressed the following views, which he has politely furnished for our columns: —

"It has been said, Mr. President, that farmers are the founders of human civilization; and this I believe to be true. It is a fact that has been verified, from time immemorial, that when the red man of the forest commenced the use of the plough and became a farmer, he then gave up the chase. It has also been said, that if there is any one business, calling, or profession more independent than others, it is agriculture; and this is probably true, as agriculture is a great centre, about which all other occupations in society seem to revolve. Trade, commerce, manufactures, and even the learned professions, in some good degree, owe their welfare to this branch of industry. Therefore the farming community are a part of a great whole, which must be preserved in complete harmony, or else bring death, distress, and famine, upon the land. And he who sets himself to work in good earnest, with hand and mind, to explore the hidden treasures of the earth, (and I do not here mean digging California gold, but more valuable treasures — those which sustain human life, and increase human happiness, and bless the race,) — to him who sets himself to work in earnest, with the aid of scientific research, and practical experience in this business, will be likely to turn every thing on his farm to good account. And I know of no case where scientific research and practical experience can be better applied than in the matter of manures, which is the subject now under discussion. Manures are the great stimulants that cause the earth to increase her productions; and to consider the manner of making and applying them to the ground, in the cheapest and best way, is the object for which we are here convened. Manures may be procured by the wealthy (who do not, and need not, stop to count the cost) in a manner that will not do for the man of small means. We, sir, must learn to make manure from means within our reach, and from materials gathered from our own farms. I believe, sir, that the attention of the young has been called to this subject (in part at least) by our meetings here, for a few years past, and also by the agricultural papers and pamphlets now so widely circulated. The farmers' boys begin to feel that they want more education, and in this they are right; let them have it, their occupation requires it; for is it not a fact that the soil cannot be cultivated to the best possible advantage without some knowledge of its constituent parts, so as to understand what is lacking in some soils and what superabounds in others, and thus be able to apply such manures, or helps, as will make each foot of ground more productive? To do this, it will be necessary for the farmer to bring to his aid the all-powerful science of chemistry — a science without a parallel in its extent and utility. Much has been said about the use of charcoal as a manure; and although I have never tried experiments like those which have been described by some who have spoken here, yet I have used it as a manure for more than forty years; I mean charcoal dust, or the fine, broken coal which is too small to be taken up by the rake, and is left upon the bed or hearth, and which is mixed with ashes in the process of charring. This article will keep the rain off for about one year, and, of course, will not freeze, as it remains entirely dry; so that it can be used in winter, to cover over the manure heap from the stable, and prevent the escape of the ammonia and other gases; and by this process the heap is increased both in quantity and quality. I have made some experiments with mud, or muck, from swamps. This article, when pulverized, is worth more than half as much as manure from the stable, for raising potatoes in dry, sandy ground. I have also used bone-dust, lime, ashes, and plaster, all of

which are good, but ought to be scientifically applied. Ashes will cause moss upon low lands; bone dust is very good, but costs me more than I can make it worth.

SOOT AS A MANURE.

We copy from the journal of the English Royal Agricultural Society, giving an account of the mode of cultivation and use of soot, by Mr. Dimmery.

"'The general price is sixpence per bushel; the quantity used on the farm is upwards of three thousand bushels a year, one half of which is applied to the *potato*, and the other to the *wheat crop*.' A large flock of sheep gives 'tail-dress,' preparatory to turnips, which follow the wheat, and intervene between it and the potatoes. It is not the present object to enter into any further detail of the particular routine, but merely to make use of the preceding quotation as a prelude to the question of soot as a manure. 'We have not,' says Mr. Morton, 'been able to obtain from Mr. Dimmery any idea of *how* soot acts in producing such effects, as it evidently does both on the potato and wheat crop; the effect of it is particularly evident on the wheat, for however sickly it looks in the spring, its color and the vigor of its growth is changed in a few days after it has been applied.' Whatever may be thought of the limited and special applicability of soot, yet where it *does* suit, and is proved by continuous facts to be eminently useful, even when applied in quantity so small as twenty-five bushels to the acre, in such places it is, to all available intents and purposes, the very compound itself which comprises the essentials of the vaunted, mystified preparation of carbon, that now bores the imagination. Soot is the purest carbonized product of mineral coal; it contains oily and volatilized resinous matters, and, above all, a fixed neutral salt of ammonia, which is perfectly soluble in watery menstrua, but retentive of its ammonia till a more powerful alkali displace it; then, as by mixture with lime, potass or soda, the volatile ammonia is liberated, and revealed by its pungent odor. Without asserting what may or may not be the components of any nostrum, we unhesitatingly offer a strong opinion of the efficacy of soot — an efficacy not to be rivalled or surpassed by any known preparation whose chief component is free carbon."

EDUCATED LABOR.

It is a very common remark, that, if we want to have any thing done correctly, we must attend to it ourselves. This arises, in the first place, no doubt, from the greater interest we have in the business, and in the next place, from our understanding best what needs to be done. Hardly any man has had charge of work, where a number of hands were employed, without being more or less hindered, as well as vexed, oftentimes by ignorance and awkwardness, to say nothing of carelessness, on the part of some of his hands. Some men seem to have no kind of thought as to *what* needs to be done in a given case; or, if that is told them, they are as much at a loss to know *how* it is to be done. They must be told what and how they shall do, and must be expected to exercise only physical strength, which is thus reduced to nothing better than mere brute force. For the ox can draw the plough or the cart as he is directed. Such men can work well for A or B, or any body that will find them a head, but they can never work for themselves. Of this class are necessarily most of our Irish and Canadian laborers. This is practically understood, and the price of their labor is graded accordingly. The six or eight dollars per month, which is all they can earn, is all that mere lifting or carrying is worth. It is the price of *uneducated* labor.

In the same field, perhaps, with the man that earns his six dollars per month, is another that earns and receives his fifteen dollars; another who can earn twelve dollars; and still another, we will suppose, who earns ten dollars. The difference of price is made, not from a regard to their power of body, not from their age, but for the difference of skill and ability to turn off work. One of them can only do as he is told; two of them need some direction, but are tolerable hands. The first is able, in the absence of his employer, to take the management of affairs, plan out the work, assign to each his place, and, with all his care and supervision of the rest, still does more than either of them. He receives fifteen dollars per month. That is the price he receives for *educated* labor.

The education of the laborer is not wholly derived from books. At first sight it might seem not to depend on them at all. Sometimes a man without books may become a skilful workman; but his education goes on in a different way. He is thrown in contact with men that understand their business, he sees how work is done, and, by practice, he may at length be enabled to work with readiness himself. Observation, attention, have educated him. But to become a really skilful man he must become a *thinking* man. He must be able in the outset to place distinctly before his mind just what he wishes to do; he must then look carefully at the means to be used to do it; he must be able to select the best, without trying each different way first; and *then* he is ready to work. Nor must he be obliged to spend much time in planning his work. It is obvious that such a habit of thinking is best formed, in fact it can hardly be formed at all, except by the aid of books, and the education of the school-room. If the habit of thinking is only really possessed, the application to business is very easy, as every one knows who has had occasion to direct or to witness the work of two men, the one a thinker, the other a man of mere physical strength.

Any act of physical labor can, as we have seen, be reduced to three elements: first, the determining of what must be done, including the planning of the same; secondly, determining the way to exercise the requisite physical strength; and thirdly, applying the strength. The last all men possess sufficiently in a state of nature. The second depends mainly on practice, with some care and attention. The first, and most important, without which the others are comparatively nothing, — for they cannot be exercised, or, if exercised, can only be so at random, — is the result of education.

Hence arises the necessity of education to every department of labor, that labor may be rightly directed, so as to yield the greatest product at the least expense. The principle illustrated in the case above supposed of the four laborers, is being acted out, for better or for worse, on every farm and in every workshop in the state. Men are earning their six and eight, or their fifteen and twenty dollars per month, or more, according as that labor is educated or uneducated.

The improvement in the arts and in agriculture, and the competition which the business of Vermont must now meet, are making it absolutely necessary to them, as they value their success or even existence, no longer to rest satisfied with any thing short of rightly educated labor. — But of this more at another time. — *Vermont State Agriculturist.*

There are three principal elements of productive farming: — *Labor — Capital — Intelligence.*

NORFOLK AGRICULTURAL SOCIETY.

On Wednesday of last week, we had the pleasure of attending the Convention at Dedham, held for the purpose of forming an Agricultural Society for the county of Norfolk. The meeting was large, and composed of zealous and efficient friends of agriculture, from different parts of the county.

The Convention was organized by the appointment of Hon. Charles F. Adams, of Quincy, to the office of President, and of other gentlemen as temporary officers. Mr. Adams briefly addressed the Convention, on the important subject before them, remarking, that as he had inherited considerable real estate, he should give particular attention to the subject of agriculture, in order to manage it with advantage. Hon. Josiah Quincy, Jr., late mayor of Boston, addressed the Convention in his usual spirited and able manner. During the session, brief and animated remarks were made by Hon. B. V. French, of Braintree, Hon. M. P. Wilder, of Dorchester, S. Walker, Esq., of Roxbury, E. K. Whittaker, Esq., of Needham, and by others.

A constitution was adopted, and a large number of names obtained as members. A subscription was opened, headed by Mr. Adams, the president, for $300. Messrs. French, Wilder, and A. D. Williams, of Roxbury, subscribed $100 each.

The following officers were chosen for the ensuing year: Hon. M. P. Wilder, President; Hon. C. F. Adams, Hon. B. V. French, Hon. S. D. Bradford, of Roxbury, Cheever Newhall, Esq., of Dorchester, Rev. E. Burgess, of Dedham, Hon. Jos. L. Richardson, of Medway, Vice-Presidents; Hon. Edward L. Keyes, of Dedham, Recording Secretary; E. K. Whittaker, Esq., Corresponding Secretary; Mr. Enos Foord, of Dedham, Treasurer. Various other officers were also chosen.

A vote of thanks was passed to Messrs. Adams, French, Wilder, and Williams, for their liberal donations; and to Mr. Whittaker, for his zeal, perseverance, and efficient labors, in getting up the Convention. A letter was read from General Dearborn, mayor of the city of Roxbury, excusing his non-attendance, on account of physical inability.

Messrs. Walker and Williams set a noble example, and pledged Roxbury for $500; Mr. Wilder, and other gentlemen, pledged Dorchester for $400; and their example was followed by liberal gentlemen of other towns. The whole permanent fund, raised on the spot, amounted to over $2800, with a fair prospect of adding several thousand dollars more, from members, and by donations.

Throughout all the proceedings, the utmost harmony and most gratifying enthusiasm prevailed, and the result has been auspicious, and highly satisfactory to the friends of agricultural improvement.

POSTAGE ON SEEDS, SCIONS, &c.

The post-office laws should be so modified as to allow of sending very small packages, containing seeds, scions, &c., by mail, as this would offer great facilities to cultivators, and, of course, to improvements in agriculture and horticulture; and there would be an advantage in a greater revenue to government, without any extra expense, of consequence, in transportation. The following is a copy of a petition adopted by the Cincinnati Horticultural Society. We hope that other societies will coöperate in the endeavor to bring about a change so desirable.

To the Hon. the House of Representatives of the People of the United States in Congress.

The subscribers respectfully petition your honorable body for such a modification of the post-office laws as will enable those persons who are engaged in horticultural pursuits, or others, to transmit by mail, seeds, grafts, and such other horticultural objects as are occasionally sent by mail, at a rate of postage not exceeding that of newspapers, provided they be in packages of not more than two ounces in weight.

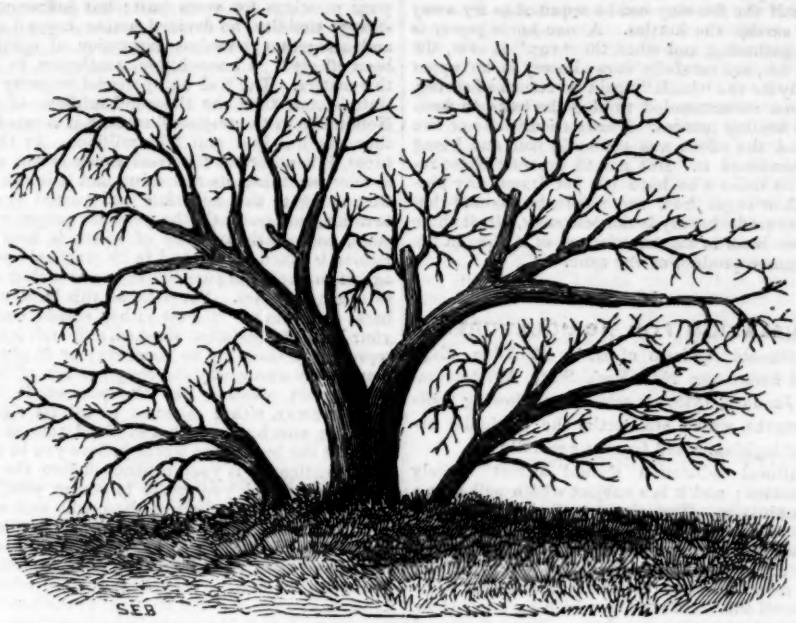
Believing that you will at once perceive the general advantage to our country from every increased facility of disseminating throughout its varied districts the various plants and fruits which may be thought useful for cultivation, and especially such as it may be desirable to test in different soils and climates, we consider it only necessary to remind you that the charge of letter postage, according to the present system, retards the progress of improvement in horticulture, and therefore deserves modification.

We might add, that we have no doubt the revenues of the post-office would be greatly increased by the proposed amendment; we consider, however, that by its adoption the public good would be so much promoted, that no question of revenue should be allowed to affect it.

PRESERVATION OF BUTTER.

At a late Council of the Royal Agricultural Society of England, a few years since, a jar of butter was received from Henry Wood, Esq., as a specimen of the successful mode adopted for its preservation when that article is intended for export to foreign climates.

Mr. Wood informed the Council that this butter had been prepared on the 19th inst., (June,) according to the process adopted in Eastern countries, where it was used for culinary purposes instead of hog's lard, which the Mahometan law prohibited, and would keep for any length of time in a perfect state of preservation, although it contained no salt or other additional substance. This preservative state of the butter was induced by the removal of scum, and the dissipation of the watery particles of fresh butter, effected by the gentlest possible application of sufficient heat to produce the result. Mr. Wood stated that in Asia this gentle heat was obtained by the natives by filling a large, open, earthen-ware pan with powdered and well-dried cow-dung, and then setting fire to it, introducing into the midst of the burning cow-dung an earthen vessel containing the butter, which thus became melted; and when the scum, as it rose, had been successively removed, and the watery particles driven off by the heat, it was poured into a jar and preserved for use. Mr. Wood suggested that a sand-bath, properly regulated, might answer the same purpose as the dried cow-dung, and as the process was so very simple, there could be no difficulty in preparing it; and that, when once prepared, the butter never became tainted. Mr. Wood stated that he carried with him to the Cape of Good Hope some butter prepared in the same way, a year previously, and which was there pronounced to be superior to the salted butter of the colony and for culinary purposes far superior to lard.



THE ENDICOTT PEAR TREE.

AGE, OVER TWO HUNDRED AND TWENTY-ONE YEARS.

Our obliging friend, Mr. FOWLER, has furnished us with the following interesting facts in regard to the famous Endicott pear tree, together with a fac simile of the same, as it appears in winter, and from which we have made our engraving on a larger scale.

In 1632, Mr. Endicott, one of the early governors of Massachusetts, received from the Court of Assistants, a grant of three hundred acres of land, situated in that part of Danvers now known as the New Mills. This tract of land he afterward called his "Orchard Farm." Tradition says, the governor brought the pear tree over when very small, in a flower-pot, when he came to Salem, in the year 1628. It is supposed the tree was first set out in his garden, at his town residence, but was subsequently removed, in the year 1633, to this farm, where it now stands. The tree still retains considerable vigor, and continues to bear fruit, in some seasons, of a good quality, although it can be ranked only in the second class of pears. It is ripe in October.

It can be seen from the cars of the Essex railroad, when passing over the Iron Factory pond, toward the New Mills, on the left hand. I saw it distinctly yesterday, and I observed that it was surrounded by a rude fence. It still very much resembles, at a distance, the wood cut I sent you, although taken some years since. It will be interesting to travellers to have their attention directed to this ancient tree.

Yours,

S. P. FOWLER.

DANVERS, NEW MILLS, *Jan.* 1849.

MAPLE SUGAR.

Farmers who have maple-trees should be prepared for making sugar, as warm days, producing a good flow of sap, are common the latter part of winter and early in spring. Success in this business depends very much on being well prepared, and managing every thing with the greatest economy, and in the best manner. The following judicious remarks are from G. Butler, Clinton, N. Y., in the Albany Cultivator: —

I do not intend here to speak of the best way of producing this article in its purity. That has often been done through your columns by those better qualified than myself. The object is, to induce those having the *means*, to *make* it. Many farmers, having abundance of the sugar maple, object to engaging in this business, alleging that the sale of the fuel necessary for its manufacture would purchase an equal amount of sugar ready made. I am quite certain that my own experience, for a series of years, has resulted in a different conclusion. Take the last season for an example. About forty barrels of sap were boiled, consuming nearly three cords of refuse wood, chiefly bass and hemlock, and producing about eighty pounds of sugar and sixteen gallons of molasses. Estimating the sugar at ten cents a pound, and the molasses at fifty cents a gallon, — and the sales were all made at a higher rate, — the amount is sixteen dollars. The wood used could hardly have been sold for three dollars. My apparatus for boiling is not the most economical, being a caldron set in brick, in connection with a five pail kettle, with a spiral flue around the whole. A large sheet-iron pan is said to be far preferable, by exposing a much larger surface to the fire, by which the evaporating process is greatly expedited. A small building, contiguous to my dwelling, contains my boiling apparatus, and sufficient space for nearly two years' supply of fuel, consisting of old rails, stumps, and parts of logs too knotty or tough to be reduced for the stove, all gath-

ered in the previous season, so that when sugar time comes, half the fire may not be required to fry away the sap *outside* the kettles. A one-horse power is used for gathering, and when the "run" is over, the buckets, &c., are carefully stowed away in an upper loft, ready for the "bush" again on return of spring. It has been recommended to plug the trees, to facilitate the healing process. I have tried it one or two years, and the effect was evidently bad, and I long since abandoned it. But not to protract these remarks: let those who have not yet drawn any portion of their sugar from the maple, be assured that this home-made luxury is not less *sweet*, albeit there may be less *sweat* in the manufacture of it, than in the more common product of the cane.

LEGISLATION FOR AGRICULTURE.

From the able address of Lewis F. Allen, Esq., delivered before the New York State Agricultural Society, January, 1849, we select the following judicious remarks, which are worthy the particular attention of legislators and farmers generally: —

Agricultural education should attract largely your attention; and it is a subject which will bear a little examination. The pittance of eight thousand dollars a year is now doled out of your public treasury, a bare recognition only of the importance and value of agricultural associations, of which the stipend of seven hundred dollars is paid to your society. To call this state bounty, which we in courtesy do, is little better than mockery. Forty thousand dollars a year would now be less, compared with the wealth and resources of the state, than ten thousand dollars in 1819. Why, gentlemen, the annual appropriations to agricultural advancement from the state treasury, is less than that given to three of your colleges, where less than two hundred students yearly graduate. Appropriations amounting to more than five hundred thousand dollars of public money have been made by law for the endowment of colleges; and your literature fund is still annually drawn upon to the amount of fifteen thousand dollars in contributing to their support, while their halls remain a sealed book to him who looks only to agriculture as the profession of his life; and of the thousands who there receive the bounty of the state in aid of their education, not a tithe of them, in the course of their lives, add a dollar to the physical or productive wealth of the country. The common school, or the village academy, is the only institution where the young farmer gains admittance; and even there, as at present constituted, he hardly acquires an idea of the rudest elements of his future profession, or of those studies which properly belong to it.

These remarks are not made in a querulous or fault-finding temper. It is right that we have colleges and academies for the few who aspire to the higher walks of professional or scientific life, as well as common schools for the million. No state can be well or wisely constituted without them, and I would not abate one jot or tittle from the wholesome support which a broad and liberal system of education demands. But we should claim, and insist, that departments devoted to agricultural teaching, or to the development of agricultural science, should be established, either as branches of our seats of learning, or as independent institutions. Why should not the farmer be educated to the top of his faculties, as well as those who select what are termed the learned professions as their pursuit? If our sons cannot be taught the education they seek in the colleges, — and there are well-grounded doubts of this fact from the moral malaria too often existing within and around them, — institutions for their sole education should be aided, or erected, and endowed by the state. This subject has been annually debated in your meetings for years past; but influenced by a strange timidity, no decided action beyond a formal and altogether harmless expression of opinion has been effected. I beseech you, gentlemen, to look at this matter. The real and personal property of this state is more than one thousand millions of dollars. Nominally, in the assessors' returns, it is rated at less than six hundred and fifty millions. In these returns, it is notorious that real estate is not assessed at over two thirds its real value, and it is safe to say, that owing to the imperfect and partial system of taxation, not one half the personal property of the state, comparatively little of which is held by the farmer, is taxed at all; and in its practical operation, agricultural capital pays two to one over that devoted to other purposes. Yet with all this burden on its back, the farming interest either stands back from your halls of legislation abashed, although nominally represented there by its members; or if, plucking a momentary courage by the congregation of its numbers on an occasion like the present, it literally shrinks away, either ashamed to ask its rights, or, if asking, couched in such a subdued tone of humility, that the legislature scarce believe you in earnest. This, gentlemen, is your attitude before the temporary power which you create to govern you! Contrast it with the conduct of those who seek a different kind of favor at its hands. Watch the thousands of applicants for corporate and exclusive privileges, and state patronage, who have in times past besieged your halls of legislation. With what confidence they approach and lay siege to the law-making power! and how like "sturdy beggars" they persevere, till, right or wrong, their importunities are granted! And in parenthesis I might continue to remark, that the history of our corporate legislation is monstrous. Some years by-gone, and banking charters were the only subject of moment before these bodies; and that legislator who did not go home with more or less of the promised shares of a successful application in his pocket, was considered as but a dull financier, or strongly suspected of having what, in private life, is called — a conscience! In later time, it has been asserted that railroad corporations have controlled your legislatures — ridden into their seats by aid of free tickets; and contemporary with them, had we farmers caught the spirit of the day, and adopted characteristic weapons of success, each one of us would have appeared with a sheep on his back, or a truss of poultry at his elbow, to lunch them into acquiescence!

ADVANTAGES OF THOROUGH DRAINING.

Draining, as understood thirty years ago in England, (and to this day with us,) merely meant the making of channels to carry off surface water, and underground drains to dry bogs, or cut off springs. It has now an entirely different meaning in the agricultural world. Mr. Smith, of Deanston, near Edinburgh, was among the first to practise and explain *thorough draining*, as it is called. His system is, that *all* land requires to be drained; that the depth of loam, or soil, containing the food of plants, seldom exceeds a few inches, resting on a subsoil, or pan of clay, or hard gravel, saturated with water. By making drains from two and a half to five feet in depth, at every twenty or thirty feet, the land becomes dry; air takes the place of water; every shower, furnished with a stock of ammonia, permeates the soil, and the result is, that instead of a few inches there are as many feet of fertile loam, the action of the atmosphere being sufficient of itself to produce the change, although, to hasten the process, subsoil ploughing is made part of the system.

The change produced by the introduction of

thorough draining in Britain, is said to be truly astonishing. Not only has the produce been greatly increased, but wheat and turnips have been grown at elevations, and in districts, where their cultivation was not before thought possible. By it, crops have been rendered less liable to disease, and harvest has been forwarded nearly a month. This will be better understood, if we reflect, that when water is allowed to remain in the soil until removed by evaporation, the heat of the sun and air, instead of being imparted to the land, will actually, through this process, produce an intense degree of cold. On the other hand, were the soil so dry as to allow the rain to pass through, it would imbibe heat from every ray that fell upon it.

The British government has considered this improvement of so great importance, that, during the last three years, large sums have been loaned to all applicants, to be expended in drainage, under the superintendence of inspectors. These loans are repaid by annual instalments of six and a half per cent., for about twenty years; and as the money is borrowed by government at three per cent., these payments cancel the loan and interest. — *Robert Jardine.*

CULTURE AND PRESERVATION OF POTATOES.

Having the present year, notwithstanding the severe drought, succeeded in growing and preserving a fine and healthy crop of potatoes, I have decided to furnish you with an account of the circumstances under which they were produced, and my opinion relative thereto, for insertion in your journal, should you deem it worthy of a place therein.

About the first of May, I planted five acres in the following manner: the soil was a dry, micaceous, sandy loam, gradually rolling, with a southern exposure; the seed used was both white and purple Mercers, principally large ones, cut into three pieces, and rolled in gypsum, and allowed to lie but a few hours after cutting. The field was an old sward, chiefly of moss and garlics; the manure applied was entirely from the yards, made from the cow and horse stables and the sties, about twenty-five two-horse loads per acre, spread broadcast before the plough — the land having been heavily limed several years previous. The planting process commenced with the tillage, by dropping the pieces of the tubers, (prepared as above,) about one foot apart, in the bottom of every other furrow, which was five inches in depth and ten inches wide, strewing them with ashes and fine charcoal, (from a locomotive, in which pine wood was consumed,) about twenty bushels per acre. The ploughing was performed in the usual manner, in lands of twenty-five yards each.

Immediately after planting the ground was thoroughly rolled. After it had lain a few days, it received repeated harrowings, lengthwise of the furrows, in the warm part of the day, which was continued until the tops were three inches in height, after which they remained without tillage until they were some eight inches high, when the cultivator was passed through, between the rows, and the weeds, if any, removed. They then received a light top dressing of gypsum, after which they remained untouched until fit to harvest, which was done as soon as the skins of the new tubers were firmly set, but before all the tops were entirely dead. We began to dig about the first of September, before the autumnal rains commenced. They were placed in a cool, dark cellar, and spread on the ground floor, about eighteen inches thick, where they remained for two months, when they were assorted and placed in bins about four feet deep, there to remain until marketed in the spring. They have so far kept perfectly, there being no visible traces of disease in the entire crop.

The yield was about two hundred and fifty bushels per acre, which was a much greater product than I anticipated on account of the excessive drought. The whole expense of the tillage of this crop did not exceed four cents per bushel, independent of the planting and harvesting, which cost not less than ten cents per bushel, making the aggregate cost of producing the five acres (including the seed, eighty bushels, at eighty cents per bushel) two hundred and thirty-nine dollars. Potatoes of the quality of mine are now worth eighty cents per bushel in Philadelphia market, which would make the net value of the crop seven hundred and sixty-one dollars. Truly, this is not so lucrative as some of the miners of California have represented the raising of gold to be; nevertheless, I think the Mercers, well roasted, set quite as well upon an empty stomach as gold ore, and, judging from the effect produced upon the morals and customs of the nations in which the precious metals are found most abundant, I much prefer being classed with the cultivators than the miners. — *American Agriculturist.*

CUTTING FODDER FOR STOCK.

That cutting fodder for stock, especially the coarser kinds, is a subject worthy of more attention among farmers, will, I believe, be admitted by all who have given it any thing like a fair trial. Cut fodder, of every description, is of more value for stock than uncut. I have known persons to be of the opinion that a horse would thrive as well upon cut hay, as he would without its being cut, and a moderate allowance of oats added.

This may be claiming too much for it; but yet there is a strong argument in its favor.

Horses, as well as other stock, appear to relish the same fodder better for its being cut; besides the advantage of eating it in half the time, allowing more for rest. It also has a tendency to obviate the difficulty to which cattle and horses are subject, in the winter season, when they are kept upon dry fodder, of being bound. But another item in the account, and by no means the least, is in using up coarse fodder, such as wheat and oat straw, corn fodder, poor hay, &c, which will be much better eaten by being cut than without.

I have repeatedly seen fodder offered to cattle and refused, and the same fodder passed through the hay cutter, returned to them apparently to their satisfaction, from the disposition they made of it. Hay that is musty is much improved by cutting, as the dust becomes liberated by the operation. There is one other benefit to be derived, which is in mixing straw, poor hay, &c., with that which is good, by which means all will be eaten. Some, however, may object, that straw and poor hay are in a manner worthless, therefore nothing is gained. But we may recollect that the time has not long since gone by, when very many doubted there being any advantage in grinding corn and cobs together for provender; but experiments have established the fact that there is economy in it; and from some experience in mixing fodder, I think the advantage fully equal to mixing cobs with corn for provender. — *Maine Farmer.*

THE EGG BUSINESS IN MAINE.

It is believed that more than 2,000,000 dozen of eggs have been sent from Maine to Boston this season, and have been sold for something like $300,000. This sounds like a large story, but those who are engaged in the trade will fully sustain it. There are more than forty men who are busily engaged in this business. — *Hallowell Gazette.*

Domestic Department.

System, Order, Regularity. — The importance of attending to these points must be apparent to every one who has had any experience in managing a household, and who has the important and indispensable talent of observing. Supposing, then, my young friends to be early risers, your attention should be next directed towards having a system and a regular time for every thing you do. "There's a time to work, a time to sing, a time to play," &c. According to your own desires, necessities, or tastes, have your moments or hours set apart, and when once fixed, adhere to them, and make every other thing about the house adapt themselves accordingly. In this way you will soon have united and harmonious action, and every thing will go on like "clock work." You know, always, where to find yourself, and every one else will know where to find you, and place their dependence and make their calculations accordingly. This is supposing that you are the head of an establishment, for there must always be a head to a body. But if you are not at the head, you can regulate according to that head, and if there is system about it, you are as much the governor of your time as if you were the main regulator. If there is not system about it, I pity you from my heart; you are a slave indeed, and must have the patience of Job and the meekness of a lamb, if your temper is not ruffled. From all the scourges and distempers incident to the ills of human life, God save me from the factions and disturbances of an irregular household. Behold the beautiful, grand, and incomprehensible system of all nature, the sublime regularity of the heavenly universe; watch the harmony of system, and the beauty and regularity displayed by the Divine Regulator, and who will deny that we have not there an unmistakable example, for us to follow?

Your friend,

— *Missouri Farmer.* AMELIA.

Indulge the Curiosity of Children. — Suppress not their curiosity or inquisitiveness. It is no failing in or of itself. It is, rather, one of the stronger incentives and the most prominent means to become learned and wise. It is generally from ignorance and pride, indifference or a peevish disposition, that a man commands his children to be silent, or reproaches them for an improper and reprehensible curiosity when they inquire about something, and are not satisfied with the first answer given them. They must indeed learn and use prudence and discretion in the company of strangers who are present, not on their own account, but on that of their parents. But parents, guardians, and teachers, if they love their children or pupils, will kindly instruct them in these things; it will be their pleasure, too, to answer their questions; not with a dry yes or no, but in such a manner as will convey the information they desire, and yield them satisfaction. Yes, they will seize these opportunities of exercising the reflection of the child or youth, by encouraging it to propose questions upon those subjects with which it is yet unacquainted.

And should these questions be of such a nature as should render their parents or instructors unable to answer them, this should not make them unwilling to confess their own ignorance upon the subject, or to excuse themselves through the imperfections of human knowledge, or to endeavor to make the inquirer comprehend that the answer to this question presupposes a knowledge which he has not, nor can have at present, but that his application to the subject will be rewarded if he persevere therein. — *Charlottesville Rep.*

Toast and Water. — This article, simple as it is, is rarely well prepared. Cut an upper crust of bread as thick again as it is usual for toast; brown it carefully, but see that it be not burnt, smoked, or black; pour on as much water as is required, and cover the jug till cold. A slice of thinly cut orange or lemon peel infused with it, improves it greatly; it should be made early in the day during summer, and placed in the sun, when it may be drank at pleasure.

Preparation of Coffee. — In Silliman's Journal we find a notice of a memoir on coffee, by the distinguished French chemist, M. Payen. The results brought out by his chemical researches agree exactly with facts previously known in regard to this article. A great error in the preparation of coffee is, that it is burned too much, by which the liquid, when it is brought to the table, is destitute of agreeable flavor, and has a bitter, unpleasant taste. The reason of this is shown.

"Coffee, roasted only till it becomes slightly red, preserves the maximum of weight and aroma, but gives out less coloring matter. In this state, one hundred pounds are found to have lost fifteen, but have increased to the bulk of one hundred and thirty. Roasted to a chestnut color, as is commonly done, the loss is twenty per cent., while the increase in volume is from one hundred to one hundred and fifty-three. This swelling of the grain depends upon the property which the nitrogenous matter deposited within the tissue has of puffing up remarkably when heated.

"If the heat is continued until a dark-brown color is produced, and the grain is covered with a sort of glaze, the loss is twenty-five per cent., while the original quantity of nitrogen, two hundred and forty-five per cent., is reduced to one hundred and seventy-seven, being a loss of one fourth."

Recipe for making Yeast. — To two middling-sized potatoes add a pint of boiling water and two tablespoonfuls of brown sugar. One pint of hot water should be applied to every half pint of the compound. Hot water is better in warm weather. The yeast, being made without flour, will keep longer in hot weather, and is said to be much better than any in previous use. Try it. — *Maine Farmer.*

Boys' Department.

Resolution. — We often see children attempt to accomplish what is beyond their strength or ability, when a few years old; but after passing their childhood, and becoming great boys, they often lose that resolution. When they have had time and opportunity to improve their minds, and their bodies have become firm and muscular, so that much exercise is necessary to health, they often shrink from mental or bodily labor, as though it were a task.

We would caution all boys against this love of ease. Let them look around and see what is to be done in study or useful labor, and take hold and accomplish it with decision, and when one thing is done take hold of another; keep up a resolution and determination to do every thing in its proper time, and in a proper manner. In this why there

will be no accumulation of difficulties, but every thing may be done with ease and despatch.

CRUELTY TO ANIMALS. — The following lines contain excellent hints for our young readers. Let every farmer's son read them, and when the season of birds and insects comes round again, remember to put the excellent views here given into practice.

"Thanks to my star, I can say I have never killed a bird. I would not crush the meanest insect which crawls upon the ground. They have the same right to live that I have; they received it from the same Father, and I will not mar the works of God by wanton cruelty.

"I can remember an incident in my childhood which has given a turn to my whole life and character. I found a nest of birds in my father's field, which held four young ones. They had no down when I first discovered them. They opened their little mouths as if they were hungry, and I gave them some crumbs which were in my pocket. Every day I returned to feed them. As soon as school was done, I would run home for some bread, and sit by the nest to see them eat for an hour at a time. They were now feathered and almost ready to fly. When I came one morning, I found them all cut up into quarters. The grass around the nest was red with blood. Their limbs were raw and bloody. The mother was on the tree, and the father on the wall, mourning for their young. I cried myself, for I was a child. I thought, too, that the parents looked on me as the author of their miseries, and this made me still more unhappy. I wanted to sympathize with and comfort them. When I left the field, they followed me with their eyes, and with mournful reproaches. I was too young and too sincere in my grief to make any apostrophes, but I can never forget my feelings. The impression will never be worn away, nor can I ever cease to abhor every species of inhumanity towards inferior animals."

Health.

The great error in regard to health is in neglecting to preserve it, and, when it is gone, relying too much on medicine, instead of good management, to restore it. The old and true saying, that "an *ounce* of *prevention* is worth a *pound* of *cure*," is worthy of far more consideration than it usually receives. Many persons do not truly value health while they possess it. The poet justly observes,

"How blessings brighten as they take their flight!"

EXPOSURE TO THE AIR. — The importance of attending to the habitual exposure of children to the air, is not duly estimated. At no period of life does any cause produce such permanent ill effects, as in the feeble and susceptible age of children. The bad effects of want of pure air and exercise are seen in children confined to manufactories, and in those inhabiting a dense and badly-ventilated part of a large city. Contrast these with children of the country, and we shall see a wonderful difference.

TO CURE WARTS OR CORNS. — Take the yolk of an egg, thicken it with fine salt, which apply as a poultice at night, leaving it off in the morning. Thus continue for two or three nights, until the part affected bears a whitish apearance; then leave it off entirely; and the wart or corn, it is said, will come out, root and branch. If a little of the leaves of rue is bruised and added, it is said to be the better.

Mechanics' Department, Arts, &c.

COVERING METALS WITH BRASS OR BRONZE. — For brass, employ a solution, in water, compounded of five hundred parts of carbonate of potash, twenty parts chloride of copper, forty parts sulphate of zinc, and two hundred and fifty parts of nitrate of ammonia; and after scouring the article to be coated, properly, it is put in commotion at the ordinary temperature with the negative pole of *Bunsen* battery, the positive decomposing pole a plate of brass.

For bronze. Make use of the same preparation, and perform in the same manner, as for brass, with the exception of substituting a salt of tin for the sulphate of zinc, and apply bronze to the positive pole, instead of brass.

By means of these solutions, wrought or cast iron, steel, lead, zinc, tin, and the alloys of these metals, either with each other or with bismuth and antimony, may, with facility, be coated with brass or bronze, and after having undergone the usual coloring process they equal in beauty the finest bronzes.

When very large surfaces are to be coated, the number of pairs of plates to the battery should be increased. By this method, rough cast iron may be made to assume a very beautiful appearance, and will remain unoxydized when not exposed to the weather. For *outside work*, articles should be protected by a coating of suitable varnish. — *N. Y. Farmer.*

TO CUT GLASS OR DRILL GLASS. — Wet the implement in a solution of camphor in spirits of turpentine.

A FINE BLUE WASH FOR WALLS. — To two gallons of whitewash, add one pound of blue vitriol dissolved in hot water, and one pound of flour, well mixed.

AGRICULTURE IN NEW HAMPSHIRE.

The New Hampshire Legislature convened on the third week of November. Gov. Williams, in his short address, thus speaks on the subject of agriculture: —

Our state is emphatically an agricultural state — its interests and the occupations of her citizens essentially of an agricultural character; and as the Constitution recommends these interests to your fostering care, you will undoubtedly consider the propriety of endeavoring, by the organization of agricultural boards or county associations, to awaken an increased zeal and interest in agricultural improvements.

Agriculture, whether considered in reference to the number of persons to whom it gives subsistence, the value of its annual exports, the amount of capital which it employs, its necessity for the support of all other pursuits, the moral worth which distinguishes the people devoted to this primitive employment, or its tendency to give stability and permanency to our institutions, may well be regarded as the paramount interest of the country, and the basis of all its wealth and prosperity. — *Farmer's Monthly Visitor.*

AMERICAN FARMERS.

Many thousand farmers in New England rear large families, pay all their debts and taxes promptly, live independently, well clothed and comfortably housed, and provided for on farms of fifty acres. The plea is, that these people labor severely. This is a great mistake. They have much because they waste no time. With them there is "a place for every thing, and every thing in its place." Their horses, cattle, tools, and implements, are attended to with clock-like regularity. Nothing is put off till to-morrow that can be done to-day. Economy is wealth, and system affords ease. These men are seldom in a hurry, except in harvest time. And in long winter evenings, or severe weather, which forbids employment out of doors, one makes corn brooms, another shoes, a third is a carpenter, cooper, or tailor; and one woman spins, another weaves, and a third plaits "Leghorn bonnets." And the families thus occupied are among the most healthy and cheerful in the world. It is easy with them to reduce their wishes to their means, if convenient or prudent, and to extend their means to their wishes. — *Maine Cultivator.*

CLEARING AWAY OBSTRUCTIONS TO THE PLOUGH.

Messrs. Editors: This is a subject which nearly interests every farmer in our state. Those who have travelled through different parts of our state, and have been at all observant of the state of things, must know that stumps, stones, old logs, and other obstructions, are more or less abundant. Now, Farmer Thrifty is one of those men who in reasoning, always endeavors to come at the bottom of his subject. And his first object to be accomplished is, to clear away all obstructions from the field, so that a complete unbroken furrow may be turned from one end to the other; this, as Farmer Thrifty says, is beginning at the right end of business.

Ploughing is the grand operation in husbandry. If a field be poorly ploughed, it cannot yield a good crop, however skilfully managed in other respects. And let the question be asked, what proportion of the arable land in our state is capable of being well ploughed? Much has been said lately in regard to improvements in the construction of ploughs. But of what avail is the most consummate skill in the making of this grand instrument of agriculture, if our fields are to remain encumbered with stumps, roots, stones, &c.? A well-constructed stump machine should be owned in every neighborhood where stumps abound; and I have heard Farmer Thrifty say that he wished that the inventive genius of some mechanic would make us off just the right kind of thing for extracting stones from the ground. After procuring suitable implements for performing all this business, it will not be so great a task as might be imagined, to clear away all obstructions from our arable lands. Farmer Thrifty says that he has determined to persevere in this business, till his whole farm is entirely cleared of obstructions to the plough. Let us, then, gentlemen farmers, imitate this worthy and patriotic citizen, and the agriculture of the state of Maine shall be placed on equal or higher footing than that of Great Britain. — *Old New England Farmer.*

NEW DUCK.

There has been read to the Zoölogical Society the description of a new species of Duck, (*Fuligula ferinoides,*) by Mr. A. D. Bartlett. Three examples having passed through the hands of Mr. Bartlett, which appeared to resemble rather too closely to admit of their being hybrids, as was supposed of the first which occurred, the author was induced to examine all the species of this genus which are known to inhabit Europe and America. The result has been his conviction that the birds exhibited are not only new to Britain, but have hitherto escaped the knowledge of naturalists altogether. The capture of a female will complete the evidence ingeniously adduced by Mr. Bartlett; and his discovery will be a subject of interest to the students of British and northern ornithology, to whom a new species is now a thing scarcely to be hoped for. — *Book of Facts.*

IMPOLICY OF BURNING GREEN WOOD.

Few things show the tenacity with which we cling, even after the clearest demonstration that such is the truth, to antiquated error, than the fact that there are many individuals, at the present day, who religiously believe, and, what is worse, so far as regards the comfort of themselves and families, practice the doctrine that green wood for fuel is better, and of course more economical than dry. We think the present season one most admirably adapted to cure such an error as we conceive this opinion to be; and now, while the farmer is suffering with cold fingers from his green wood fire, and he is in good earnest lamenting the leanness of his wood yard, we would request him candidly to review the whole subject, and ask himself whether he had not better desert a position which both sound theory and daily experience show is no longer tenable.

The direct experiments of Dr. Black on fuel, and the later ones of Count Rumford, as the best mode of producing and economizing heat, have, in conjunction with the labors of others, demonstrated the very great loss those sustain who use unseasoned wood for the purpose of fuel. Making an estimate of the various kinds of green wood, hard and soft together, and of the same wood when thoroughly seasoned by exposure to the air, the difference is found to be equal to at least one third of the whole; and if dried at a temperature of one hundred, the difference will exceed this proportion. Green wood, therefore, contains at least one third its weight of water, and allowing a cord of such wood to weigh three thousand pounds, there will be one ton of wood and half a ton of water in every cord. That the wood will not burn so long as this water is present in the wood, all will admit; it must therefore be evaporated or driven off in the form of steam; or, in other words, caloric, or heat enough from other sources, must be combined with the water to boil away half a ton, or about one hundred and twenty gallons; and as this heat mostly passes off in a latent state, no possible benefit is derived from so great a waste.

The amount of dry fuel necessary to perform this operation of boiling away half a ton of water every farmer can estimate for himself; and we think no one can avoid seeing that whatever this amount may be, it is a total loss to himself. It is true, as many argue, that the consumption of a green stick of wood is less rapid than that of a dry one; but such forget, it seems, that a much larger quantity must be constantly kept on the fire to produce the same degree of heat; and that until the green wood has absorbed from other sources sufficient heat to expel the water with which it is charged, the fire is dull and the heat feeble; there is abundance of smoke, but combustion goes on slowly, or not at all.

Since the fact of the difference between the weight of dry and green wood as stated above is indisputable, we think that those who have considerable quantities of wood to move would do well to bear it in mind, as by attending to this circumstance, a very

great diminution in the amount of labor required may be made; and the striking off the transportation of thirty-three tons in one hundred, all will agree, is no trifling affair. To labor is honorable; but it is time our farmers should learn that to expend it needlessly is not profitable. — *Genesee Farmer.*

REMARKS BY THE EDITOR NEW ENGLAND FARMER.

Farmers are now generally learning the utility of seasoning wood before it is used, not only as a matter of economy in the use of fuel, but convenience is an important consideration, as a fire may be made, and a room warmed, or any process in cooking performed, in far less time by the use of dry fuel. The scarcity of wood has been one inducement to save fuel in every possible way, and that this may be accomplished by the use of seasoned wood no one will deny who has made a fair experiment.

SLOW MOTION OF OXEN.

Mr. J. Reynolds, of South Strafford, Vt., makes the following judicious remarks on the cause of a slow motion in oxen, referring to an article on this subject, on our 30th page: —

One of the principal causes of the slow motion of oxen is in the motion of the man who trains or drives them. I have noticed that a slow man always has slow oxen, and on the contrary, a man of quick motion has quick oxen. Another thing, I think many teamsters talk too loud to their oxen. They will hear as quick as a man when called to their food, which proves that their hearing is good. Why, then, should the teamster scream so as to be heard half a mile, or more?

FARMERS' MEETING AT HANOVER, N. H.

We learn, from the Granite State Whig, that farmers and other gentlemen friendly to improvement, of Hanover, Lyme, and Lebanon, lately met in Hanover, for the purpose of discussing various subjects relating to agriculture. Asa Huntington, Esq., was chosen chairman. S. Flint, Esq., of Lyme, read an essay on Feeding Stock, after which the various points in the discourse were discussed. Other gentlemen were appointed to deliver essays at future meetings. This is but an instance of thousands of cases of the kind which should occur in the country, and which will take place when farmers are awakened to the importance of association and combined action, in effecting improvements in their profession.

APPLES ON PEAR STOCKS.

We are indebted to Mr. William Elliot, of Greenfield, in this state, for the following facts on this subject, and we should be pleased to receive the result of other experiments that tend to its elucidation.

I notice an inquiry in the New England Farmer, of January 20th, "Whether the apple has been grafted into the pear, in this section." It has been done, with good success, in this town, on a pear-tree of the Bell variety. Mr. William Mitchell has kindly furnished me with a sample of the apples which grew on this pear-tree, and which I send you. You will perceive they are of rather diminutive size, and beginning to decay. The reason for this is, they are the "last pickings." Mr. Mitchell has owned, for a number of years, the piece of land on which this pear-tree stands; and he informs me that the tree bears well every year, both pears and apples. The pears are of quite an indifferent quality; the apples are fair in size and of good quality. Should you wish further information in regard to the tree, I will endeavor to obtain it.

REMARKS. — The specimens of fruit forwarded as above, are beautiful and of excellent quality. — ED.

ACKNOWLEDGMENTS.

Of Mr. Samuel Pond, Cambridgeport, excellent specimens of Easter Beurre pears, which he raises and ripens to perfection, though this is a very uncertain kind in less skilful hands.

Of Messrs. Hyde, Newton, Yellow Bellflower, a superior fruit, but rather uncertain in most climates; and Seaver Sweet which is one of the finest sweet apples.

Of Colonel Edward Parsons, West Springfield, Bag's Favorite, a large, handsome apple, flattish-conical, yellow ground, mostly covered with red. The quality is very good, and it is highly esteemed by cultivators in that town, where it originated on the farm of Colonel Aaron Bag.

From Mr. John Washburn, Plymouth, Holmes apple. This is a small fruit, of a beautiful yellow color, and excellent flavor. Fine for the private garden. The size is rather small for the market, large size being an important requisite, to make fruit current among our New England dealers. Perhaps this is the case elsewhere. Mr. Washburn informs us that this apple flourishes remarkably well on a sandy soil.

From Charles H. Perkins, Weathersfield, Vt., a variety of apples. Jonathan, an excellent and beautiful red apple, but rather small for the market. One kind, large, and remarkably fair and handsome, but the quality is hardly first rate.

From Mr. S. Baldwin, Brighton, Catalac pear, of enormous size; an excellent variety for cooking; late fall and early winter.

We have from our friends other fruits, but too green for trial. Inquiries as to the Red Russets will be answered in our next number.

NOTICES OF PUBLICATIONS.

NEW MUSICAL WORK. — Mr. Charles H. Keith, of this city, has just published a new manual for choirs, called "THE ANTIQUARIAN." It contains a choice collection of the most admired pieces, by such composers as Billings, Holden, Belknap, Luther, Pleyel, and others of their stamp, and will doubtless be a valuable addition to our text-books for churches, as well as private use. It is a work which has long been wanted by the lovers of true melody, and will, no doubt, be introduced very generally into our churches. Published by C. H. Keith, Boston.

AN ADDRESS delivered before the New York State

Agricultural Society at the Capitol, in the city of Albany, January 18, 1849, by Lewis F. Allen. We are indebted to B. P. Johnson, Esq., for a copy of this valuable production. An extract from it may be found on another page.

BURNING CLAY FOR MANURE.

A writer in one of the English Journals has given some account of burning and applying the burnt clay as a dressing for wheat and clover. He used about one thousand bushels to the acre, and his wheat and clover were greatly benefited by it. His mode of burning was to plough up the clay in a dry time, and after piling up a sufficient quantity of fuel, somewhat in the manner of our making a coal-pit, though not so compact, — for he used stumps and such like fuel, — he piles on the clods or lumps of clay, laying it pretty high, inasmuch as the heat rises. Care should be taken to prevent the fire from bursting out. This burnt clay is then spread, a roller passed over to crush the lumps, and a bush-harrow passed after in order to spread it more equally.

ANIMAL MATTER AND PEAT.

There are other sources of alkali, for converting peat into soluble matter. Of these the chief is animal matter. Here we have ammonia produced. It has been actually proved by experiment, that a dead horse can convert twenty tons (or cubic yards) of peat into a valuable manure, richer and more lasting than stable dung; "a barrel of alewives is equal to a wagon load of peat." The next great and prolific source of ammonia is the urine. The urine of one cow for a winter, mixed up, as it is daily collected, with peat, is sufficient to manure one half an acre of land with twenty loads of manure of the best quality, while her solid evacuations and litter, for the same period, afforded only seventeen loads, whose value was only about one half that of the former. — *Dana's Muck Manual.*

AGRICULTURAL.

All of the settlements on the coast of Texas, from Galveston down, seem to have a sleepy appearance, and the people a gentlemanly contempt for manual labor; there is a great want of *energy;* the soil is good, excellent, generally speaking, and produces finely, when cultivated; but there's the rub. The only crop that at present *exceeds* their expectations, and argues favorably for the speedy settlement of the country, is that of "tow-headed children;" their attention to *that* branch is praiseworthy, and the "returns" thereof are really astonishing. They raise fine pears, (pairs.) The style of dress adopted for this vegetable race, partakes of that of the Sandwich Islanders in former times, when their costumes were limited to a feather in the hair and a ring in the nose. — *N. O. Delta.*

TO CLEAN WHEAT.

I suppose every farmer has a good fanning mill. Then let him make a large box with three apartments, about sixteen inches high, and about two feet wider than his mill — the length at his pleasure. Fit these partitions so as to set his mill on the two partitions; having the legs just go down in the two outside apartments; this you can move to any part of your farm with your mill; one part will catch the wheat and the screenings, and the other the headings. — *Prairie Farmer.*

THE OLD OAKEN BUCKET.

BY S. WOODWORTH.

How dear to this heart are the scenes of my childhood,
When fond recollection recalls them to view!
The orchard, the meadow, the deep-tangled wildwood,
And every loved spot which my infancy knew; —
The wide-spreading pond, and the mill which stood by it;
The bridge, and the rock where the cataract fell;
The cot of my father; the dairy house nigh it;
And e'en the rude bucket which hung in the well!
The old oaken bucket, the iron-bound bucket,
The moss-covered bucket, which hung in the well!

That moss-covered vessel I hail as a treasure;
For often, at noon, when returned from the field,
I found it the source of an exquisite pleasure,
The purest and sweetest that nature can yield.
How ardent I seized it, with hands that were glowing!
And quick to the white-pebbled bottom it fell;
Then soon, with the emblem of truth overflowing,
And dripping with coolness, it rose from the well;
The old oaken bucket, the iron-bound bucket,
The moss-covered bucket, arose from the well.

How sweet from the green, mossy brim to receive it,
As, poised to the curb, it inclined to my lips!
Not a full-blushing goblet could tempt me to leave it,
Though filled with the nectar that Jupiter sips.
And now, far removed from the loved situation,
The tear of regret will intrusively swell,
As fancy reverts to my father's plantation,
And sighs for the bucket which hangs in the well;
The old oaken bucket, the iron-bound bucket,
The moss-covered bucket, which hangs in the well.

THE OLIO.

THE LORD'S PRAYER. — How many millions and millions of times has that prayer been offered by Christians of all denominations! So wide, indeed, is the sound thereof gone forth, that daily, and almost without intermission, from the ends of the earth, and afar off upon the sea, it is ascending to Heaven like incense, and a pure offering. Nor needs it the gift of prophecy to foretell, that, though "heaven and earth shall pass away," these words of our blessed Lord "shall not pass away," till every petition has been answered; till the kingdom of God shall come, and his will be done on earth as it is in heaven. — *Montgomery.*

Speaking of the ancient Romans, Johnson said, "They were a people, who, while they were poor, robbed their neighbors; and when they became rich, robbed one another.

An Irishman, speaking of the rapacity of the clergy in exacting their tithes, said "By St. Patrick, let a farmer be ever so poor, they won't fail to make him pay his full tenths, whether he can or not; nay, they would, instead of a tenth, take a twentieth, if the law permitted them."

A wise girl will win a lover by practising those virtues which secure admiration when personal charms have faded.

TERMS. — THE NEW ENGLAND FARMER is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be neatly bound at 18¾ cents, or elegantly bound in muslin, embossed and gilt, at 25 cents a volume.

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